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PATENT ABSTRACTS OF JAPAN

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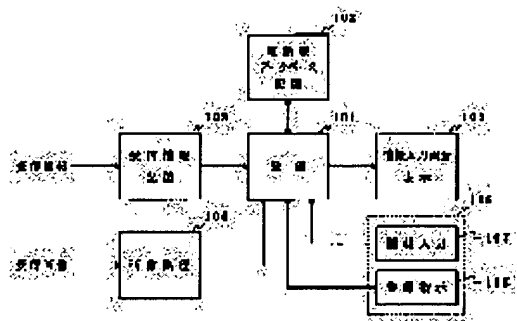
(72)Inventor : IGARASHI TOSHIAKI

(54) METHOD FOR REGISTERING DATA IN TELEPHONE DIRECTORY DATABASE AND VISUAL TELEPHONE SYSTEM

(57)Abstract:

PURPOSE: To make it possible to simply register data in a telephone directory database by a visual telephone system.

CONSTITUTION: Information such as the name, telephone number and address of a communicating party which are supplied through a line by inter-user information informing service, a caller's number informing service, or the like is stored in a received information storing means 103 and the stored information is read out from the means 103 by the operation of a registration instructing means 108 and registered in the telephone directory database. A picture processing means 104 prepares a face icon from the received information and registers the icon in the telephone directory database. A lacking part in the information can be supplied by inputting necessary information in accordance with an information input picture displayed on an information input picture displaying means 105.



LEGAL STATUS

[Date of request for examination]

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[Date of final disposal for application]

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CLAIMS

[Claim(s)]

[Claim 1] The registration approach to the telephone directory database characterized by being the registration approach to the telephone directory database which includes the information on the name of a communications partner, the telephone number, and the address at least, memorizing the information offered through a communication line during the communication link with a communications partner among said information, reading it, and registering with said telephone directory database.

[Claim 2] The registration approach to the telephone directory database according to claim 1 characterized by creating the image data of the face icon of the communications partner from the receiving image data which received through said communication line treating image information, and registering with said telephone directory database.

[Claim 3] A telephone directory database storage means to memorize the telephone directory database which includes the information on the name of a communications partner, the telephone number, and the address at least, A receipt information storage means to memorize the information offered through a communication line during the communication link with a communications partner among said information, TV phone equipment characterized by reading the information memorized by said receipt information storage means, and having a registration means to register it into said telephone directory database, and a registration directions means for directing the registration to said telephone directory database for said registration means.

[Claim 4] TV phone equipment according to claim 3 characterized by having further an image-processing means to create the image data of the face icon of the communications partner from receiving image data, and registering the image data of the face icon into said telephone directory database with said registration means.

[Claim 5] An information input screen-display means to display the information input screen for burying the blank when a blank is in said telephone directory database after registering into said telephone directory database the information memorized by said receipt information storage means, TV phone equipment according to claim 3 or 4 characterized by having further an information input means for inputting predetermined information according to said information input screen displayed on said information input screen-display means.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to the TV phone equipment which enforces the registration approach to the telephone directory database using a communication line, and its approach.

[0002]

[Description of the Prior Art] Although the TV phone is put in practical use by ISDN (service synthesis digital network) in recent years, a thing with the telephone directory database which can register individual humanity news, such as a name, the telephone number, and the address, is in TV phone equipment. Moreover, there are some telephone directory databases which can register a face icon (what iconified a partner's face by the bit map etc.).

[0003]

[Problem(s) to be Solved by the Invention] With conventional TV phone equipment, when individual humanity news was registered into a telephone directory database, each items of all had to be registered manually. For this reason, inputting each item of individual humanity news took time and effort and time amount, and it was very troublesome.

[0004] Then, the purpose of this invention is offering the TV phone equipment which enforces the registration approach to the telephone directory database which can perform registration to a telephone directory database easily using a communication line, and its approach.

[0005]

[Means for Solving the Problem] In order to solve the technical problem mentioned above, the registration approach to the telephone directory database of this invention is the registration approach to the telephone directory database which includes the information on the name of a communications partner, the telephone number, and the address at least, it memorizes the information offered through a communication line during the communication link with a communications partner among said information, reads it, and registers it into said telephone directory database.

[0006] In one mode of this invention, the image data of the face icon of the communications partner is created from the receiving image data which received through said communication line treating image information, and it registers with said telephone directory database.

[0007] Moreover, a telephone directory database storage means to memorize the telephone directory database with which the TV phone equipment of this invention includes the information on the name of a communications partner, the telephone number, and the address at least, A receipt information storage means to memorize the information offered through a communication line during the communication link with a communications partner among said information, The information memorized by said receipt information storage means is read, and it has a registration means to register it into said telephone directory database, and a registration directions means for directing the registration to said telephone directory database for said registration means.

[0008] In one mode of this invention, it has further an image-processing means to create the image data of the face icon of the communications partner from receiving image data, and the image data of the face

icon is registered into said telephone directory database with said registration means.

[0009] In one mode of this invention, when a blank is in said telephone directory database after registering into said telephone directory database the information memorized by said receipt information storage means, it has further an information input screen-display means display the information input screen for burying the blank, and an information input means for inputting predetermined information according to said information input screen displayed on said information input screen-display means.

[0010]

[Function] The functional block diagram of TV phone equipment which enforces the approach of this invention to drawing 1 is shown. In addition, the approach of this invention is applicable not only to the TV phone of 1 to 1 communication link but the video conference system which communicates among three or more communication terminals, and when it is the latter, at least one communication terminal has the function of drawing 1.

[0011] The receipt information offered through a communication line during a communication link is once memorized by the receipt information storage means 103. Here, in the case of a TV phone, the receipt information offered through a communication line during a communication link is the telephone number of the communications partner offered by the name of the communications partner offered by user-user information interception of calls services, such as ISDN, and the address, and the caller ID service etc. Moreover, you may make it offer information, such as a firm or an affiliation corporate name, an affiliation section signature, and a title, through a communication line at other communication terminals from each communication terminal in addition to a participant's name, the telephone number, and the address in the case of a video conference system. In that case, those information is memorized by the receipt information storage means 103 of each communication terminal of a receiving side.

[0012] When there is actuation of the registration directions means 108 by the user, the registration means 101 reads the information memorized by the receipt information storage means 103, and registers it into the item column to which the telephone directory database memorized by the telephone directory database storage means 102 corresponds. As for the registration directions means 108, in the case of a TV phone, it is desirable that you may be the function key formed in the control panel, and it is a locator like the mouse for on the other hand choosing a receiving screen in being the video conference system of the method with which two or more receiving screens are displayed.

[0013] In registering a face icon into a telephone directory database, the image-processing means 104 creates a face icon from a receiving image. When creating the image data of the face icon for this registration, although the amount of data must be considerably reduced from the receiving image data for a display, even if it does not carry out complicated processing like a data compression in that case, generally processing of extent which thins out a pixel suitably from the receiving image data developed to the bit map is enough. Moreover, in the case of the TV phone and video conference system treating a dynamic image, the receiving image data for one frame at the time of the registration directions means 108 being operated is extracted and processed. The face icon created with the image-processing means 104 is registered into the column of the face icon of a telephone directory database by the registration means 101.

[0014] Although it seems that the telephone directory database memorized by the telephone directory database storage means 102 is shown in drawing 3, when all those columns are not buried only with the information offered through a communication line (for example, if the information on the address leads a communication line, when it is not provided), it displays an information input screen as shown in drawing 6 on the information input screen-display means 105. This information input screen-display means 105 is for example, TV phone equipment and the monitor of the communication terminal for video conference systems. A user inputs the information on the address, for example, looking at the information input screen displayed on this information input screen-display means 105. The information input means 107 formed in the control unit 106 performs the input of this information. The information input means 107 may be a ten key which performs dial actuation in the case of a TV phone, and may be locators, such as a mouse for on the other hand gathering an alphabetic character from the keyboard or alphabetic character selection screen for carrying out the direct input of the text in the case of the

communication terminal for video conference systems.

[0015] As mentioned above, in this invention, since the information offered by a user-user information interception of calls service, the caller ID service, etc. through a communication line is registered into a telephone directory database for example, troublesome actuation like before at the time of registering those information into a telephone directory database becomes unnecessary.

[0016] Moreover, if the face icon of a communications partner is created from a receiving image and it is registered into a telephone directory database, the photograph of a communications partner is prepared, time and effort, such as making it read etc., is unnecessary, and a face icon can be registered simple, for example.

[0017] Furthermore, if the information input screen for burying the blank of a telephone directory database is displayed after registration of the information offered through the communication line and required information is inputted according to the information input screen, the part which ran short for the information offered through the communication line of a telephone directory database is suppliable.

[0018]

[Example] Hereafter, this invention is explained with reference to drawing 2 - drawing 8 per example.

[0019] The main configurations of the TV phone equipment by the 1st example of this invention are shown in drawing 2.

[0020] CPU1 controls each part of equipment according to the program stored in ROM of the storage section 2. In addition, in this example, although this CPU1 has the function of the registration means 101 of drawing 1, and the image-processing means 104, an image processing processor may be independently formed as an image-processing means 104.

[0021] The storage section 2 is equipped with stores mentioned above, such as ROM and RAM, and the telephone directory database storage means 102 and the receipt information storage means 103 of drawing 1 belong to this storage section 2.

[0022] The image speech compression expanding section 3 carries out expanding processing of the receiving image data and receiving voice data which were received from demultiplexing and the line control section 4, respectively, and sends voice data for image data to a display 7 through a D/A converter (not shown) at the loudspeaker section (not shown), respectively. Moreover, the image speech compression expanding section 3 extracts the image data for creating a face icon, and also has the function sent to CPU1. Furthermore, the image speech compression expanding section 3 carries out compression processing of the image data inputted from the voice data inputted from the voice input section 5, and the image input section 6, respectively, and it sends it to demultiplexing and the line control section 4 in order to make them transmit.

[0023] Demultiplexing and the line control section 4 divide into image data, voice data, and other data the signal received through the circuit, and image data and voice data are sent to the image speech compression expanding section 3, and they send other data to CPU1, respectively. Reception also of the information, such as a name of the communications partner offered through a circuit, the telephone number, and the address, is carried out in this demultiplexing and the line control section 4, and it is sent to CPU1. Moreover, with the control data which received the image data and voice data by which compression processing was carried out in the image speech compression expanding section 3 from CPU1, demultiplexing and the line control section 4 carry out multiplexing processing, and transmit to a circuit.

[0024] The voice input section 5 is a microphone and the sound signal inputted here is sent to the image speech compression expanding section 3 through an A/D converter (not shown).

[0025] The image input section 6 is a television camera, and the image (image) signal inputted here is sent to the image speech compression expanding section 3 through an A/D converter (not shown) if needed.

[0026] A display 7 is the monitor of a TV phone and consists of CRT or a liquid crystal display.

[0027] The control unit 8 is equipped with the function key which are a ten key for performing dial actuation, and the registration directions means 108 of drawing 1. In addition, although it is desirable that a ten key is an independent key, the definition of the one key of a ten key is carried out, and you

may make it use the function key which is the registration directions means 108. Moreover, a ten key serves as the information input means 107 of drawing 1 for performing an alphabetic character input in this example.

[0028] In case registration to a telephone directory database is performed to drawing 3, an example of the functional screen displayed on a display 7 is shown. In the example of illustration, the receiving screen 31 is displayed on the left-hand side of a screen, and each item of the telephone directory database 32 is displayed on right-hand side.

[0029] Next, with reference to drawing 4, the registration procedure to a telephone directory database is explained.

[0030] First, in step 401, information, such as a name of the communications partner offered through the circuit, the telephone number, and the address, is memorized by the storage section 2 of drawing 2.

[0031] Next, in step 402, when it supervises whether the function key for registration directions of the control unit 8 of drawing 2 was operated and actuation of the function key is detected, it progresses to the following step 403.

[0032] At step 403, CPU1 reads information, such as a name of the communications partner memorized by the storage section 2 of drawing 2, the telephone number, and the address, and they are registered into the applicable item column of the telephone directory database too memorized by the storage section 2, respectively. Moreover, the receiving image data in the time of the function key for registration directions of a control unit 8 being operated is extracted in the image speech compression expanding section 3 of drawing 2, the image processing of it is carried out by CPU1, and registration of a face icon is registered into the column of the face icon of a telephone directory database. Therefore, if the function key of a control unit 8 is operated when it is thought that it is the most suitable while a user looks at the receiving screen 31 of drawing 3, the receiving image at that time will be registered as a face icon.

[0033] An information input screen is displayed on drawing 5, and the registration procedure at the time of enabling it to compensate with the insufficient part of a telephone directory database is shown.

[0034] Step 501 is the completely same registration procedure as step 401 of drawing 4 - step 403. That is, the information and the face icon about the communications partner offered through the circuit by actuation of the function key for the registration directions by the user are registered into a telephone directory database, respectively.

[0035] Next, in step 502, it distinguishes whether a blank is in the item of the registered telephone directory database. And processing is ended when there is no blank in the item of the telephone directory database progressed and registered into step 503 when a blank was in the item of the registered telephone directory database (i.e., when all the items of a telephone directory database are not buried only with the information offered through the circuit) (i.e., when all the items of a telephone directory database are buried only with the information offered through the circuit).

[0036] The input screen corresponding to the information which runs short is expressed to the display 7 of drawing 2 as step 503. The example of an input screen when drawing 6 runs short of the information on the address is shown. That is, if the information on the address leads a circuit, when it is not provided, the individual humanity news dialog box 60 for an address input shown in drawing 6 is displayed on a display 7.

[0037] In the following step 504, a user inputs the data of the address, looking at the individual humanity news dialog box 60 for an address input displayed on the display 7. This entry of data is performed using the ten key formed in the control unit 8 of drawing 2. That is, correspondence with actuation and alphabetic data of a ten key is given beforehand, and a user inputs text according to the regulation. In addition, a user can also end processing, without inputting the information on this address. In that case, the column of the address of the telephone directory database corresponding to the communications partner is left behind as a blank.

[0038] The registration procedure explained above can be performed after communication link termination with a communications partner. That is, the storage section 2 of drawing 2 memorizes the information about the communications partner offered through the circuit during the communication link

with a communications partner. And a user operates the function key for registration directions of a control unit 8 at the suitable time under communication link with a communications partner. Then, the receiving image in the time is extracted and the storage section 2 memorizes. After the communication link with a communications partner is completed, CPU1 carries out the image processing of the data of the receiving image too memorized by the storage section 2, creates a face icon, and registers it into a telephone directory database while it reads the information about the communications partner memorized by the storage section 2 and registers it into a telephone directory database. Furthermore, an information input screen is displayed on a display 7 if needed, and the information which runs short is compensated. In addition, only the registration procedure explained by drawing 4 is performed during the communication link with a communications partner, and the procedure after step 502 of drawing 5 can be performed after communication link termination.

[0039] Next, the 2nd example which applied the approach of this invention to the video conference system is explained.

[0040] Although the functional screen for telephone directory database registration displayed on drawing 7 by the monitor 70 of the communication terminal for television conferences according to this example is shown, all meeting participants' images 72-74 are displayed on the monitor 70 like illustration.

[0041] Hereafter, with reference to this drawing 7 and drawing 8, the registration procedure to the telephone directory database in the communication terminal for television conferences is explained.

[0042] First, in step 801 of drawing 8, individual humanity news, such as a name offered through the communication line corresponding to each receiving image, the telephone number, and the address, is memorized in the storage section. In addition, it is possible to constitute the information with various firm where a participant belongs in addition to the information offered by circuit service or affiliation corporate name, affiliation section signatures, titles, etc. model names of the communication terminal which a participant owns, attributes, etc. in the case of a video conference system so that it may transmit to other communication terminals through a communication line from each communication terminal, and the telephone directory database which contains all of those information in that case can be built. Moreover, you may make it also transmit the information on a name, the telephone number, and the address not from circuit service but from each communication terminal.

Answer [0043] Next, in step 802, it supervises whether there was any selection of the receiving image by the user. Selection of this receiving image is performed when a user moves the pointing cursor 71 in a screen using a mouse, as shown in drawing 7. Selection of the receiving image is performed by moving the pointing cursor 71 in a screen using a mouse, pushing the carbon button of a mouse in the display area of a desired receiving image, and specifically starting drag actuation.

[0044] Although it supervises whether there was any assignment of registration at the following step 803, assignment of this registration moves the pointing cursor 71 into the display area of the telephone directory database 75 by drag actuation to which the pointing cursor 71 in a screen is moved in the condition [having pushed the carbon button of a mouse], and is performed by drop actuation of detaching the carbon button of a mouse there. Registering into a telephone directory database the individual humanity news corresponding to the receiving image currently shown in the location which started drag actuation by this the drag-and-drop actuation of a series of is directed.

[0045] At the following step 804, the individual humanity news corresponding to the selected receiving image is read from the storage section, and it registers with a telephone directory database. Moreover, at this time, a face icon is created from the selected receiving image, and it registers with a telephone directory database.

[0046] Furthermore, an information input screen as shown in drawing 6 is displayed, and you may make it input the information which ran short. As for the input of this information, it is simplest to input direct text from a keyboard. Or an alphabetic character selection screen may be displayed and you may carry out by the menu manipulation by the mouse.

[0047] In addition, although the upper explanation explained the example of a mouse as a locator for performing cursor actuation, as a locator, a trackball, a joy stick, a light pen, etc. may be used in addition

to a mouse. Moreover, the cursor actuation by the cursor key of a keyboard is sufficient.

[0048]

[Effect of the Invention] Since the information offered by a user-user information interception of calls service, the caller ID service, etc. through a communication line is registered into a telephone directory database, for example according to this invention, it can register by easy actuation.

[0049] Moreover, if the face icon of a communications partner is created from a receiving image and it is registered into a telephone directory database, a face icon can be registered simple.

[0050] Furthermore, if the information input screen for burying the blank of a telephone directory database is displayed and required information is inputted according to the information input screen, the part which ran short for the information offered through the communication line of a telephone directory database is suppliable.

[Translation done.]

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TECHNICAL FIELD

[Industrial Application] This invention relates to the TV phone equipment which enforces the registration approach to the telephone directory database using a communication line, and its approach.

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PRIOR ART

[Description of the Prior Art] Although the TV phone is put in practical use by ISDN (service synthesis digital network) in recent years, a thing with the telephone directory database which can register individual humanity news, such as a name, the telephone number, and the address, is in TV phone equipment. Moreover, there are some telephone directory databases which can register a face icon (what iconified a partner's face by the bit map etc.).

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EFFECT OF THE INVENTION

[Effect of the Invention] Since the information offered by a user-user information interception of calls service, the caller ID service, etc. through a communication line is registered into a telephone directory database, for example according to this invention, it can register by easy actuation.

[0049] Moreover, if the face icon of a communications partner is created from a receiving image and it is registered into a telephone directory database, a face icon can be registered simple.

[0050] Furthermore, if the information input screen for burying the blank of a telephone directory database is displayed and required information is inputted according to the information input screen, the part which ran short for the information offered through the communication line of a telephone directory database is suppliable.

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TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] With conventional TV phone equipment, when individual humanity news was registered into a telephone directory database, each items of all had to be registered manually. For this reason, inputting each item of individual humanity news took time and effort and time amount, and it was very troublesome.

[0004] Then, the purpose of this invention is offering the TV phone equipment which enforces the registration approach to the telephone directory database which can perform registration to a telephone directory database easily using a communication line, and its approach.

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MEANS

[Means for Solving the Problem] In order to solve the technical problem mentioned above, the registration approach to the telephone directory database of this invention is the registration approach to the telephone directory database which includes the information on the name of a communications partner, the telephone number, and the address at least, it memorizes the information offered through a communication line during the communication link with a communications partner among said information, reads it, and registers it into said telephone directory database.

[0006] In one mode of this invention, the image data of the face icon of the communications partner is created from the receiving image data which received through said communication line treating image information, and it registers with said telephone directory database.

[0007] Moreover, a telephone directory database storage means to memorize the telephone directory database with which the TV phone equipment of this invention includes the information on the name of a communications partner, the telephone number, and the address at least, A receipt information storage means to memorize the information offered through a communication line during the communication link with a communications partner among said information, The information memorized by said receipt information storage means is read, and it has a registration means to register it into said telephone directory database, and a registration directions means for directing the registration to said telephone directory database for said registration means.

[0008] In one mode of this invention, it has further an image-processing means to create the image data of the face icon of the communications partner from receiving image data, and the image data of the face icon is registered into said telephone directory database with said registration means.

[0009] In one mode of this invention, when a blank is in said telephone directory database after registering into said telephone directory database the information memorized by said receipt information storage means, it has further an information input screen-display means display the information input screen for burying the blank, and an information input means for inputting predetermined information according to said information input screen displayed on said information input screen-display means.

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the functional block diagram of this invention.

[Drawing 2] It is the main configuration block Fig. of the TV phone equipment by one example of this invention.

[Drawing 3] It is drawing showing the functional screen of the TV phone equipment of drawing 2.

[Drawing 4] It is the flow chart which shows the registration procedure of the TV phone equipment of drawing 2.

[Drawing 5] It is the flow chart which shows the registration procedure and information input procedure of TV phone equipment of drawing 2.

[Drawing 6] It is drawing showing the information input screen of the TV phone equipment of drawing 2.

[Drawing 7] It is drawing showing the functional screen of the communication terminal for video conference systems by one example of this invention.

[Drawing 8] It is the flow chart which shows the registration procedure of the communication terminal for video conference systems of drawing 7.

[Description of Notations]

1 CPU

2 Storage Section

3 Image Speech Compression Expanding Section

4 Demultiplexing and Line Control Section

5 Voice Input Section

6 Image Input Section

7 Display

8 Control Unit

31, 72-74 Receiving image

32 75 Telephone directory database

70 Monitor

71 Pointing Cursor

101 Registration Means

102 Telephone Directory Database Storage Means

103 Receipt Information Storage Means

104 Image-Processing Means

105 Information Input Screen-Display Means

106 Control Unit

107 Information Input Means

108 Registration Directions Means

[Translation done.]

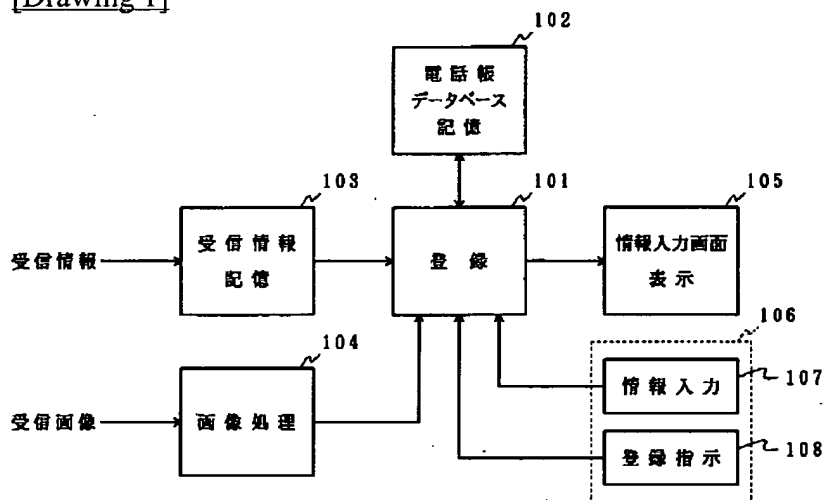
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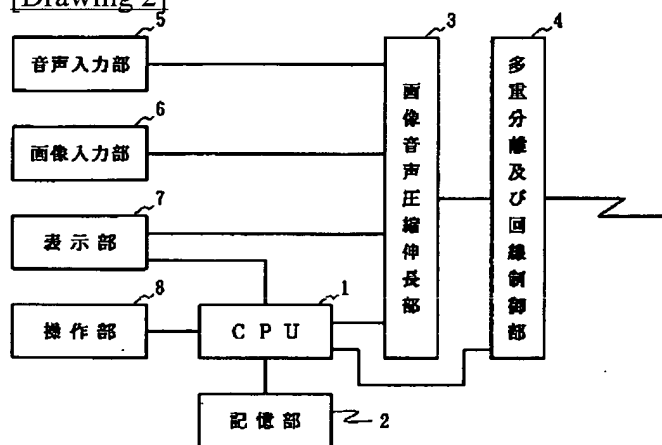
DRAWINGS

[Drawing 1]



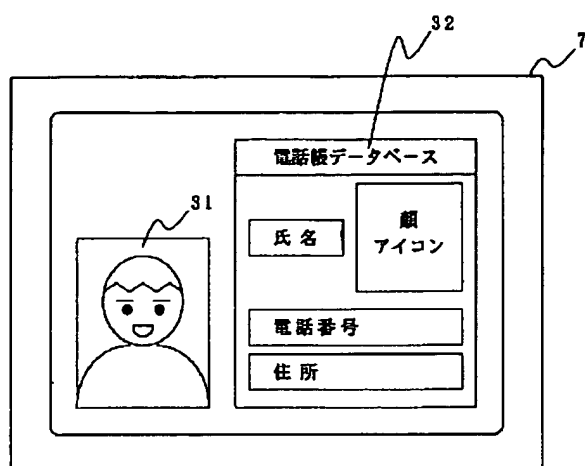
101: CPU
 103: Information storage
 108:
 104: Image processor
 102: Database
 105: Display
 107: Input means

[Drawing 2]

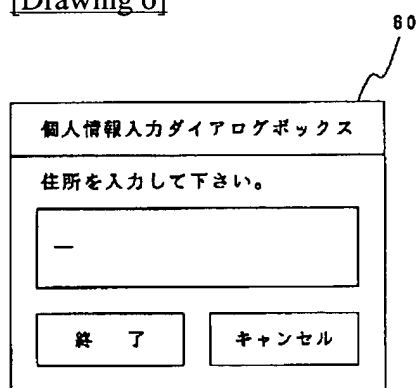


3: Codec
 7: Display
 4: multiplexer
 6: camera
 5: microphone
 8: Controller
 2: Storage

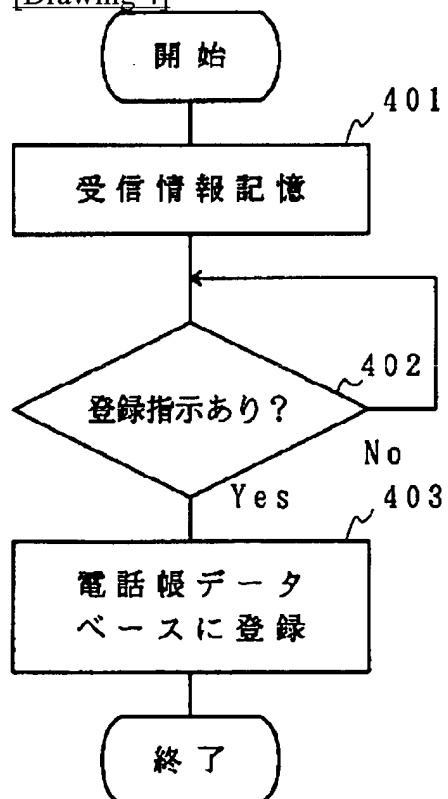
[Drawing 3]



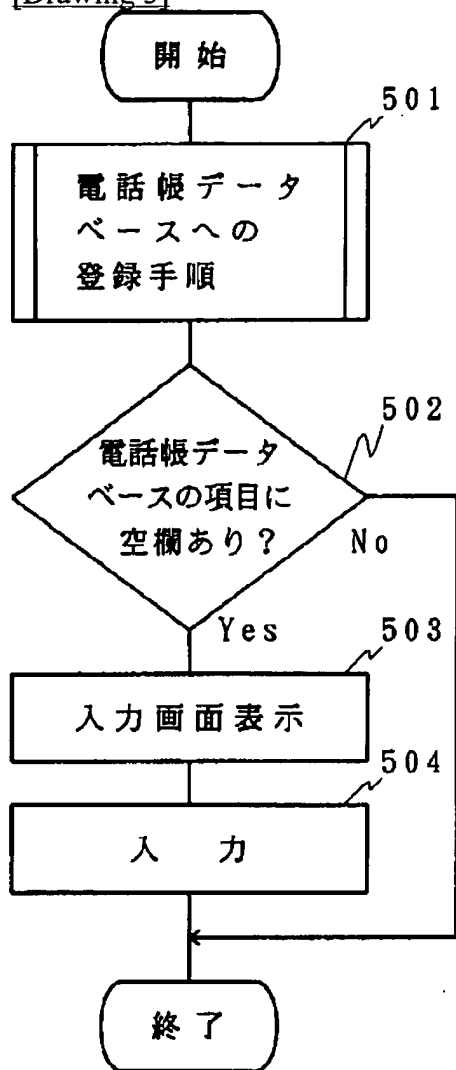
[Drawing 6]



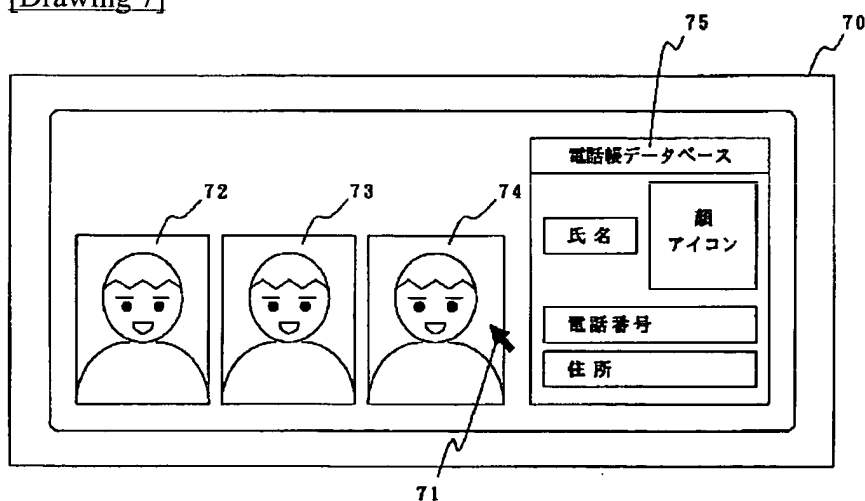
[Drawing 4]



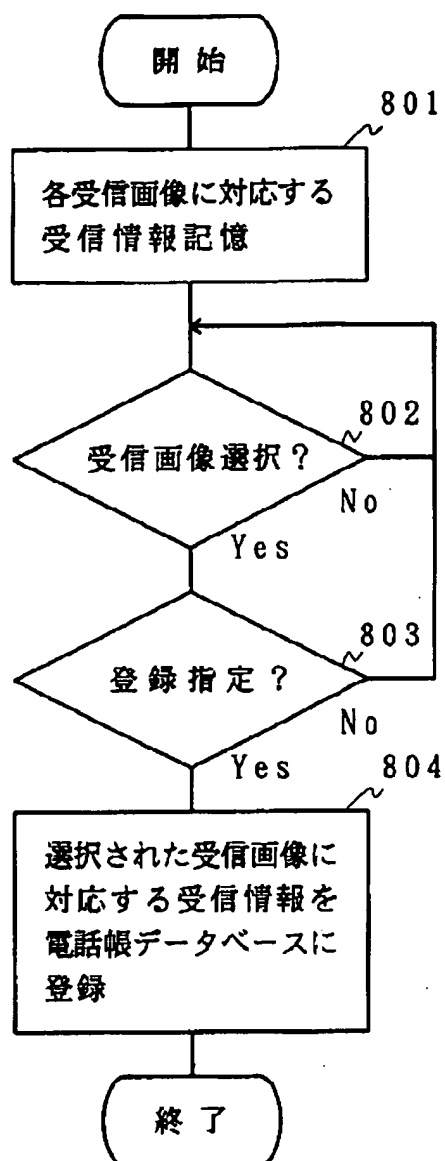
[Drawing 5]



[Drawing 7]



[Drawing 8]



[Translation done.]